

**Amendments to the Claims:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

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1. (Currently Amended) A method for queuing control of variable bandwidth communications channels comprising:
    - detecting a change from a first bandwidth to a second bandwidth of a communication channel, the communication channel including a plurality of lines, wherein the change includes one or more lines of the plurality of lines becoming active and one or more lines of the plurality of lines being broken; and
    - adjusting a quality of service controller to compensate for the change from a first bandwidth to a second bandwidth.
  2. (Original) The method of claim 1, wherein adjusting the quality of service controller further comprises:
    - calculating the second bandwidth;
    - providing the second bandwidth via a feedback loop to a transmission rate selector; and
    - computing transmission rates.
  3. (Currently Amended) The method of claim 2, ~~wherein transmitting data further comprising~~ comprising maintaining quality of service.
  4. (Original) The method of claim 2 further comprising:
    - queuing first data cells of having fixed transmission rates;
    - assigning a high transmission priority to the first data cells;

queuing second data cells having variable transmission  
rates; and  
assigning a lower priority to the second data cells.

5. (Original) The method of claim 4, wherein a cell selector selects first and second queued cells for transmission based upon their associated priority.

6. (Currently Amended) An apparatus comprising:  
means for detecting a change from a first bandwidth to a second bandwidth of a  
communication channel, the communication channel including a plurality of  
lines, wherein the change includes one or more lines of the plurality of lines  
becoming active and one or more lines of the plurality of lines being broken; and  
means for adjusting a quality of service controller to compensate for the change from a  
first bandwidth to a second bandwidth.

7. (Original) The apparatus of claim 6, wherein the means for adjusting the quality of  
service controller further comprises:

means for calculating the second bandwidth;  
means for providing the second bandwidth via a feed back  
loop to a transmission rate selector; and  
means for computing transmission rates.

8. (Currently Amended) The apparatus of claim 7, further comprising ~~wherein the means for  
transmitting data further comprises:~~

means for maintaining quality of service.

9. (Original) The apparatus of claim 7 further comprising:

means for queuing first data cells of having fixed transmission  
rates;

means for assigning a high transmission priority to the first data cells;

means for queuing second data cells having variable transmission rates; and

means for assigning a lower priority to the second data cells.

10. (Original) The apparatus of claim 9, wherein a cell selector selects first and second  
queued cells for transmission based upon their associated priority.

11. (Currently Amended) A computer-readable medium having stored thereon a plurality of  
instructions, said plurality of instructions when executed by a computer, cause said computer to  
perform the method of:

detecting a change from a first bandwidth to a second bandwidth of a communication  
channel, the communication channel including a plurality of lines, wherein the  
change includes one or more lines of the plurality of lines becoming active and  
one or more lines of the plurality of lines being broken; and

adjusting a quality of service controller to compensate for the change from a first  
bandwidth to a second bandwidth.

12. (Original) The computer-readable medium of claim 11 having stored thereon additional  
instructions, said plurality of instructions when executed by a computer, cause said computer to  
further perform the method of:

calculating the second bandwidth;

providing the second bandwidth via a feed back

loop to a transmission rate selector; and

computing transmission rates.

13. (Original) The computer-readable medium of claim 12 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of maintaining quality of service.

14. (Original) The computer-readable medium of claim 12 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of:

queuing first data cells of having fixed transmission

rates;

assigning a high transmission priority to the first data cells;

queuing second data cells having variable transmission

rates; and

assigning a lower priority to the second data cells.

15. (Original) The computer-readable medium of claim 14 having stored thereon additional instructions, said plurality of instructions when executed by a computer, cause said computer to further perform the method of selecting first and second queued cells for transmission based upon their associated priority by the cell selector.

16. (Currently Amended) An apparatus comprising:

one or more digital data sources;

a digital communication switch electronically coupled to the digital data sources, wherein the switch comprises a quality of service controller and data queues; and

a variable bandwidth bi-directional communication channel electronically coupled to the digital communication switch, wherein the digital communications switch monitors bandwidth changes in the variable bandwidth bi-directional communication channel.

17. (Original) The apparatus of claim 16, wherein the quality of service controller further comprises:

rate controllers electronically coupled to the data queues;

a cell selector electronically coupled to the rate controllers and the communication channel; and

a processor electronically coupled to the rate controllers, cell selector and the communication channel.

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